

BookAuthorID	BookID	AuthorId	BookTitle	AuthorName
1	1	1	Connecting With Computer Science	Greg Anderson
2	1	1	Connecting With Computer Science	Dave Ferro
3	1	1	Connecting With Computer Science	Rob Hilton
4	2	2	Oracle SQL By Example	Alice Rischert
5	3	3	Introducrtion to Programming with Java	John Dean
6	3	3	Introducrtion to Programming with Java	Dabe Ferro

ReviewerId	ReviewerName	ReviewDateID	DateReviewed
1	Naadace	1	11/5/2007
2	Charles	2	10/3/2008
3	Justice	3	9/15/2009
4	Rigo	4	5/6/2008
5	Ruth	5	11/15/2008
6	Bavitha	6	6/4/2008

ReviewDateID	ReviewerID	DateReviewedID	ReviewerName	DateReviewed	Review
1	1	1	Naadace	11/5/2007	"I had to buy this book for school"
2	2	2	Charles	10/3/2008	"I like it"
3	3	3	Justice	9/15/2009	"I use SQL daily"
4	4	4	Rigo	5/6/2008	"The best Java Book"
5	5	5	Ruth	11/15/2008	"Currently Using"
6	6	6	Bavitha	6/4/2008	"Very Good Book"

BookID	BookTitle
1	Connecting With Computer Science
2	Oracle SQL By Example
3	Introducrtion to Programming with Java

AuthorId	Author Name
1	Greg Anderson
2	Alice Rischert
3	John Dean
4	Dave Ferro
5	Ray Dean
6	Rob Hilton

3NF

Duplicates removed, subsets eliminated, non-key related data removed

1. Customer Table

CustomerId	FirstName	LastName	CustEmail	CustAddress	CustPhone
1	John	Locke	jlock@island.com	815 Oceanic Cir	481-516-2342
2	KATe	Austin	kaustin@island.com	316 Ajira	243-261-5184
3	Benjamin	Linus	blinus@darma.org	1977 Darma Villiage	null

2. Purchase Table

PurchaseDateId	DatePurch
1	9/22/2004
2	5/23/2010

4. Book Table

BookId	BookTitle	Price	ISBN
1	Connecting With Computer Science	\$94.00	978-143908035
2	Oracle SQL By Example	\$42.00	978-0137142835
3	Introduction to Programming with Java	\$65.00	978-0073047027

3. Author Table


AuthorId	FirstName	LastName
1	Greg	Anderson
2	Alice	Rischert
3	John	Dean
4	Dave	Ferro
5	Ray	Dean
6	Rob	Hilton

5. Review Table

BookId	ReviewerId	ReviewerName	DateReviewed	Review
1	1	Naadace	11/5/2007	"I had to buy this book for school"
1	2	Charles	10/3/2008	"i like it"
2	3	Justice	9/15/2009	"I use SQL Daily"
3	4	Rigo	5/6/2008	"The Best Java Book"
3	5	Ruth	11/15/2008	"Currently Using"
3	6	Bavitha	6/4/2008	"Very Good Book"

6. Mississippi.com DB Table

BookAuthorID	BookId	AuthorId	CustomerId	PurchaseDateId
1	1	1	1	1
2	1	4	1	1
3	1	6	1	1
4	2	2	2	1
5	3	3	1	2
6	1	1	3	2
7	3	5	1	2
8	1	4	3	2

This color identifies dependencies. 

- 1. Created table to contain only customer information. All customer information now solely exists in a single table. **CustomerId** now links all related customer information.
- 2. For some reason there were only 2 purchase dates in the data set... **PurchaseDateId** now links all related purchase information.
- 3. Created a table to contain only author information. All author information now solely exists in a single table. **AuthorId** now links all related information.
- 4. Created a table to contain all related book information, and generated the **BookId** field from that. **BookId** now links all related book information.
- 5. Created a table to contain all review information. This table uses **BookId** from the Book table along with all other review information.
- 6. Using the Primary keys generated from each of the tables above, the Mississippi.com table is now Third Natural Form.